```
RCS file: /s6/cvsroot/euterpe/BOM, v
Working file: BOM
head: 5.105
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1940; selected revisions: 33
description:
top level BOM
revision 3.804
date: 1995/06/02 00:36:56; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/nasty
Fix hermnasty
revision 3.803
date: 1995/06/02 00:17:30; author: mws; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
uu/uuprblmfrz.Veqn uu/Makefile uu/uu control.pim:
 Freeze pla at end of evblm pipe assumed that both hiccup and interrupt would
 not be requested at the same time. Generally this is true, except for the
 one-issue window before the interrupt can cancel latent heldback store-and-
 swap hiccups. Test cachesynchnasty2 var c 1 happened to accept an interrupt
 at the same time a SAAS heldback hiccup released, causing the event entry
 to be aborted leaving the hiccup to go to the SAAS but not unexpectedly
 with the user code running in event mode.
_____
revision 3.802
date: 1995/06/01 00:49:51; author: fwo; state: Exp; lines: +2 -2
Release Target: euterpe/compass/layouts
     stpadvdda.ly
     stpadrf.ly
     stpadnormal.ly
     stpadlowres.ly
     stpadlowcap.ly
     stpadgnd.ly
     stpadcorner.ly
     stpadbasevss.ly
     stpadbase.ly
These files should have been checked into proteus, not euterpe.
_____
revision 3.801
date: 1995/06/01 00:34:29; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     heldback debug.siq
New trace file.
revision 3.800
date: 1995/05/31 18:36:26; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
```

Exhibit D59 Page 1 of 53

```
Consolidate most recent cc bug fix to .0 BOM
Pick up placement tweaks for iteration in
     хlu
     rq
     nb
     hc0
     gf
     es
     at
revision 3.799
date: 1995/05/31 17:53:58; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     template
var0 -> cvar0
-----
revision 3.798
date: 1995/05/31 17:34:22; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Arrrrrgh. Trying again.
_____
revision 3.797
date: 1995/05/31 17:28:40; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Another try.
_____
revision 3.796
date: 1995/05/31 17:13:30; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
New hermes tests.
_____
revision 3.795
date: 1995/05/31 14:08:50; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    template
exinbash 0 rules should be euterpe
_____
revision 3.794
date: 1995/05/31 06:37:13; author: billz; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/dr
Added this flat pim file, droutdpcontrol.pim, to
place drprbcsm and other drout control plas and
random cells.
revision 3.793
date: 1995/05/31 06:31:38; author: billz; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/cc
```

Exhibit D59 Page 2 of 53

```
Two changes rolled into one:
1) logic (wiring only) change:
nbcout control field bit 14 (bit 4 of physical address) to come
from hexcount lsb for both writebacks and fills, not hardwired to zero.
This is for backing from hermes interleaved spaces.
2) layout change: some hexcount cells in cc control blob moved
down to avoid collision at the top level.
Converges in zero iterations.
revision 3.792
date: 1995/05/31 05:18:32; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     template
Increase exintbast simtime
revision 3.791
date: 1995/05/31 03:46:46; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     template
Added exintbash variations
_____
revision 3.790
date: 1995/05/31 02:40:32; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/doc
.0 BOM for major snapshot update
euterpe.doc revision 1.25
date: 1995/03/21 16:38:12 LT; author: rich; state: Exp; lines: +24 -15
altered the content and wording of the Sofa and Hermes clock generation
descriptions to be up to date.
memory.mif revision 4.34
date: 1995/05/30 11:45:04 LT; author: bobm; state: Exp; lines: +295 -2477
Two rows in the Interleaved Hermes Channel physical address
space table were mislabeled.
verify.html revision 18.15
date: 1995/05/02 11:50:37 LT; author: doi; state: Exp; lines: +5 -1
describe additional functionality for the "forward-only-active" keyword
revision 3.789
date: 1995/05/30 21:44:42; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/nasty
Fix potential bug in all nasty tests - checking final results before
all cylinder finished.
Also fixed bug in cachesynchnasty2, where r6 and r8 were not saved/restored
by the event handler.
______
```

Exhibit D59 Page 3 of 53

revision 3.788

```
date: 1995/05/30 20:47:58; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/compass
.0 release for next major snapshot update
revision 3.787
date: 1995/05/30 20:43:00; author: mws; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
euterpe.V hz/hz.V: Correct stage of net names to go with the fixing this in CC
  (the hz.V stage names were left alone but annotated with correcting comments;
  euterpe.V changed HZtCdNdxHzrdS1S4L7L8 to HZtCdNdxHzrdS1S4L9L10):
  cc/cc.V cc/cc control blob.pim: Hz.V lost track of the pipeline stages in
  building hz2or4ahdR7R8, actually delivering it in R9R10. Hz.V cannot fix,
   so we just pipeline 2 less to compensate. Test cachesynchnasty2_var_a_1.
euterpe.status: Delete note saying we need a tau phase check (done).
 Clarify impact of interruptibility of GGFMul on prohibitting src=dst.
revision 3.786
date: 1995/05/30 16:58:38; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     nb debug.srl
Added signals and cvs string.
revision 3.785
date: 1995/05/30 13:25:12; author: vanthof; state: Exp; lines: +2 -2
Release Target: euterpe/compass/layouts
      stpadbase.lv
      stpadbasevss.lv
      stpadcorner.ly
      stpadgnd.ly
      stpadlowcap.ly
      stpadlowres.ly
      stpadnormal.ly
      stpadrf.ly
      stpadvdda.ly
      vlsi.log
updating space xformer pad cells
revision 3.784
date: 1995/05/29 20:00:09; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     nb debug.srl
Debug hermnasty
revision 3.783
date: 1995/05/29 01:16:32; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
places 100% at 900ps again
revision 3.782
date: 1995/05/28 22:24:54; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/es
```

Exhibit D59 Page 4 of 53

```
move a couple of cells to stop overlap with mc. Latest power.tab.top
revision 3.781
date: 1995/05/28 22:21:02; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/rg
carve hole at top of rgcr for gf. Delete explicit DISPLAY setting from Makefile
revision 3.780
date: 1995/05/28 22:17:02; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/qf
shift lower 7 sections left
revision 3.779
date: 1995/05/28 03:35:27; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/nasty
Add rules of building _var_?_0.s
_____
revision 3.778
date: 1995/05/28 03:29:49; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/nasty
Release latest versions of exintbash.S(3.2) hermnasty.S(1.8)
_____
revision 3.777
date: 1995/05/28 03:27:56; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/nasty
Build 0 versions of var tests
_____
revision 3.776
date: 1995/05/28 03:15:13; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     template
Add var 0 tests
revision 3.775
date: 1995/05/27 21:59:16; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    template
rearrange var again
revision 3.774
date: 1995/05/27 19:33:43; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     template
Put cachesynchnasty2 var a 0 at the head of the runmm regression
revision 3.773
date: 1995/05/27 16:41:52; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/rg
```

Exhibit D59 Page 5 of 53

```
remove force of power levels on cr interface to prevent dc load problems
revision 3.772
date: 1995/05/27 08:27:36; author: mws; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
cc/cc.V cc/cc control blob.pim: Hz.V lost track of the pipeline stages
 in building hz2or4ahdR7R8, actually delivering it in R9R10. Hz.V cannot
 fix, so we just pipeline 2 less to compensate. Test cachesynchnasty2 var a 1
 noticed. Also need to update hz.V and euterpe.V to show correct staging
 and not recreate confusion as we forget what happened here. But wait for
 verification to prove this is cause of failure.
cust intf.wkz: Update Cache and CTag address setup and hold times to use the
 newly-stick-approved 400ps requirements rather than the more abitrary 50%*tick
 requirement. This reduces requirements enough to pass DTag adrs hold.
______
RCS file: /s6/cvsroot/euterpe/compass/BOM, v
Working file: compass/BOM
head: 7.21
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 67; selected revisions: 4
description:
_____
revision 4.1
date: 1995/06/01 00:49:27; author: fwo; state: Exp; lines: +2 -2
Release Target: euterpe/compass/layouts
     stpadvdda.ly
     stpadrf.ly
     stpadnormal.ly
     stpadlowres.ly
     stpadlowcap.ly
     stpadgnd.ly
     stpadcorner.ly
     stpadbasevss.lv
     stpadbase.ly
These files should have been checked into proteus, not euterpe.
revision 4.0
date: 1995/05/30 20:47:39; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/compass
.0 release for next major snapshot update
revision 3.9
date: 1995/05/30 20:47:31; author: tbr; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
revision 3.8
date: 1995/05/30 13:24:50; author: vanthof; state: Exp; lines: +2 -2
Release Target: euterpe/compass/layouts
     stpadbase.ly
```

Exhibit D59 Page 6 of 53

```
stpadbasevss.ly
     stpadcorner.ly
     stpadqnd.ly
     stpadlowcap.ly
     stpadlowres.ly
     stpadnormal.ly
     stpadrf.ly
     stpadvdda.ly
     vlsi.log
updating space xformer pad cells
______
RCS file: /s6/cvsroot/euterpe/compass/layouts/BOM,v
Working file: compass/layouts/BOM
head: 27.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 79; selected revisions: 4
description:
releasebom adding BOM
_____
revision 18.1
date: 1995/06/01 00:49:14; author: fwo; state: Exp; lines: +10 -10
Release Target: euterpe/compass/layouts
     stpadvdda.ly
     stpadrf.ly
     stpadnormal.ly
     stpadlowres.ly
     stpadlowcap.ly
     stpadgnd.ly
     stpadcorner.ly
     stpadbasevss.ly
     stpadbase.ly
These files should have been checked into proteus, not euterpe.
_____
revision 18.0
date: 1995/05/30 20:47:16; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/compass
.0 release for next major snapshot update
revision 17.2
date: 1995/05/30 20:47:08; author: tbr; state: Exp; lines: +7 -34
releasebom: File needs to be up-to-date to use commit -r
revision 17.1
date: 1995/05/30 13:24:40; author: vanthof; state: Exp; lines: +38 -2
Release Target: euterpe/compass/layouts
     stpadbase.ly
     stpadbasevss.ly
     stpadcorner.ly
     stpadgnd.ly
     stpadlowcap.ly
```

Exhibit D59 Page 7 of 53

```
stpadlowres.lv
     stpadnormal.ly
     stpadrf.ly
     stpadvdda.ly
     vlsi.log
updating space xformer pad cells
RCS file: /s6/cvsroot/euterpe/doc/BOM, v
Working file: doc/BOM
head: 22.5
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 70; selected revisions: 2
description:
BOM for doc
revision 20.0
date: 1995/05/31 02:40:14; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/doc
.0 BOM for major snapshot update
euterpe.doc revision 1.25
date: 1995/03/21 16:38:12 LT; author: rich; state: Exp; lines: +24 -15
altered the content and wording of the Sofa and Hermes clock generation
descriptions to be up to date.
memory.mif revision 4.34
date: 1995/05/30 11:45:04 LT; author: bobm; state: Exp; lines: +295 -2477
Two rows in the Interleaved Hermes Channel physical address
space table were mislabeled.
verify.html revision 18.15
date: 1995/05/02 11:50:37 LT; author: doi; state: Exp; lines: +5 -1
describe additional functionality for the "forward-only-active" keyword
revision 19.8
date: 1995/05/31 02:40:07; author: tbr; state: Exp; lines: +7 -16
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/doc/Attic/memory.mif,v
Working file: doc/memory.mif
head: 4.36
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 46; selected revisions: 1
description:
_____
revision 4.34
```

Exhibit D59 Page 8 of 53

```
date: 1995/05/30 18:45:04; author: bobm; state: Exp; lines: +295 -2477
Two rows in the Interleaved Hermes Channel physical address
space table were mislabeled.
______
RCS file: /s6/cvsroot/euterpe/doc/debug/BOM,v
Working file: doc/debug/BOM
head: 3.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 4; selected revisions: 1
description:
releasebom adding BOM
_____
revision 3.0
date: 1995/05/31 02:39:52; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/doc
.0 BOM for major snapshot update
euterpe.doc revision 1.25
date: 1995/03/21 16:38:12 LT; author: rich; state: Exp; lines: +24 -15
altered the content and wording of the Sofa and Hermes clock generation
descriptions to be up to date.
memory.mif revision 4.34
date: 1995/05/30 11:45:04 LT; author: bobm; state: Exp; lines: +295 -2477
Two rows in the Interleaved Hermes Channel physical address
space table were mislabeled.
verify.html revision 18.15
date: 1995/05/02 11:50:37 LT; author: doi; state: Exp; lines: +5 -1
describe additional functionality for the "forward-only-active" keyword
______
RCS file: /s6/cvsroot/euterpe/verify/BOM, v
Working file: verify/BOM
head: 12.34
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 404; selected revisions: 18
description:
revision 4.154
date: 1995/06/02 00:36:32; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/nasty
Fix hermnasty
revision 4.153
date: 1995/06/01 00:34:12; author: jeffm; state: Exp; lines: +2 -2
```

Exhibit D59 Page 9 of 53

Release Target: euterpe/verify/toplevel

```
New trace file.
_____
revision 4.152
date: 1995/05/31 17:53:39; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    template
var0 -> cvar0
_____
revision 4.151
date: 1995/05/31 17:33:54; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Arrrrrgh. Trying again.
_____
revision 4.150
date: 1995/05/31 17:28:12; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Another try.
_____
revision 4.149
date: 1995/05/31 17:13:09; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
New hermes tests.
_____
revision 4.148
date: 1995/05/31 14:08:33; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    template
exinbash 0 rules should be euterpe
_____
revision 4.147
date: 1995/05/31 05:18:16; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    template
Increase exintbast simtime
revision 4.146
date: 1995/05/31 03:46:28; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    template
Added exintbash variations
revision 4.145
date: 1995/05/30 21:44:18; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/nasty
Fix potential bug in all nasty tests - checking final results before
all cylinder finished.
```

Exhibit D59 Page 10 of 53

```
Also fixed bug in cachesynchnasty2, where r6 and r8 were not saved/restored
by the event handler.
revision 4.144
date: 1995/05/30 16:58:19; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    nb debug.srl
Added signals and cvs string.
revision 4.143
date: 1995/05/29 19:59:55; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     nb_debug.srl
Debug hermnasty
_____
revision 4.142
date: 1995/05/28 03:35:14; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/nasty
Add rules of building _var_?_0.s
_____
revision 4.141
date: 1995/05/28 03:29:36; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/nasty
Release latest versions of exintbash.S(3.2) hermnasty.S(1.8)
_____
revision 4.140
date: 1995/05/28 03:27:43; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/nasty
Build 0 versions of var tests
_____
revision 4.139
date: 1995/05/28 03:15:00; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    template
Add var 0 tests
-----
revision 4.138
date: 1995/05/27 21:59:02; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    template
rearrange var again
revision 4.137
date: 1995/05/27 19:33:29; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     template
Put cachesynchnasty2 var a 0 at the head of the runmm regression
______
```

Exhibit D59 Page 11 of 53

```
RCS file: /s6/cvsroot/euterpe/verify/nasty/BOM,v
Working file: verify/nasty/BOM
head: 19.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 36; selected revisions: 10
description:
releasebom adding BOM
revision 13.0
date: 1995/06/02 00:36:17; author: jeffm; state: Exp; lines: +1 -1
Release Target: euterpe/verify/nasty
Fix hermnasty
_____
revision 12.1
date: 1995/06/02 00:36:10; author: jeffm; state: Exp; lines: +3 -3
releasebom: File needs to be up-to-date to use commit -r
-----
revision 12.0
date: 1995/05/30 21:44:04; author: jeffm; state: Exp; lines: +1 -1
Release Target: euterpe/verify/nasty
Fix potential bug in all nasty tests - checking final results before
all cylinder finished.
Also fixed bug in cachesynchnasty2, where r6 and r8 were not saved/restored
by the event handler.
______
revision 11.1
date: 1995/05/30 21:43:54; author: jeffm; state: Exp; lines: +20 -10
releasebom: File needs to be up-to-date to use commit -r
_____
revision 11.0
date: 1995/05/28 03:35:06; author: lisar; state: Exp; lines: +1 -1
Release Target: euterpe/verify/nasty
Add rules of building _var_?_0.s
revision 10.1
date: 1995/05/28 03:34:59; author: lisar; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
_____
revision 10.0
date: 1995/05/28 03:29:27; author: lisar; state: Exp; lines: +1 -1
Release Target: euterpe/verify/nasty
Release latest versions of exintbash.S(3.2) hermnasty.S(1.8)
revision 9.1
date: 1995/05/28 03:29:21; author: lisar; state: Exp; lines: +3 -3
releasebom: File needs to be up-to-date to use commit -r
______
revision 9.0
```

Exhibit D59 Page 12 of 53

```
date: 1995/05/28 03:27:34; author: lisar; state: Exp; lines: +1 -1
Release Target: euterpe/verify/nasty
Build 0 versions of var tests
_____
revision 8.1
date: 1995/05/28 03:27:29; author: lisar; state: Exp; lines: +4 -4
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/Makefile,v
Working file: verify/nasty/Makefile
head: 1.14
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 14; selected revisions: 2
description:
_____
revision 1.8
date: 1995/05/28 03:34:16; author: lisar; state: Exp; lines: +26 -1
Oops forgot to add the rules (can't build locally as would clobber executables I
ned to keep
_____
revision 1.7
date: 1995/05/28 03:26:45; author: lisar; state: Exp; lines: +26 -26
Add 0 build of var tests
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachenasty.S,v
Working file: verify/nasty/cachenasty.S
head: 1.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
revision 1.2
date: 1995/05/30 21:39:23; author: jeffm; state: Exp; lines: +2 -1
Fix cachesynchnasty2 to save and restore r6 and r8 on event entry/exit.
Fix all to actually wait until all cylinders are finished before checking
cylinder status.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachenasty2.S,v
Working file: verify/nasty/cachenasty2.S
head: 1.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
```

Exhibit D59 Page 13 of 53

```
revision 1.2
date: 1995/05/30 21:39:26; author: jeffm; state: Exp; lines: +2 -1
Fix cachesynchnasty2 to save and restore r6 and r8 on event entry/exit.
Fix all to actually wait until all cylinders are finished before checking
cylinder status.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachenasty3.S,v
Working file: verify/nasty/cachenasty3.S
head: 1.4
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 4; selected revisions: 1
description:
_____
revision 1.2
date: 1995/05/30 21:39:28; author: jeffm; state: Exp; lines: +2 -1
Fix cachesynchnasty2 to save and restore r6 and r8 on event entry/exit.
Fix all to actually wait until all cylinders are finished before checking
cylinder status.
_____
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachenasty4.S,v
Working file: verify/nasty/cachenasty4.S
head: 1.4
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 4; selected revisions: 1
description:
_____
revision 1.2
date: 1995/05/30 21:39:30; author: jeffm; state: Exp; lines: +2 -1
Fix cachesynchnasty2 to save and restore r6 and r8 on event entry/exit.
Fix all to actually wait until all cylinders are finished before checking
cylinder status.
_____
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachenasty5.S,v
Working file: verify/nasty/cachenasty5.S
head: 1.7
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 7; selected revisions: 1
description:
_____
revision 1.3
date: 1995/05/30 21:39:32; author: jeffm; state: Exp; lines: +2 -1
```

Exhibit D59 Page 14 of 53

Fix cachesynchnasty2 to save and restore r6 and r8 on event entry/exit. Fix all to actually wait until all cylinders are finished before checking cylinder status. ______ RCS file: /s6/cvsroot/euterpe/verify/nasty/cachenasty5 var a1 1.exe,v Working file: verify/nasty/cachenasty5 var al 1.exe head: 11.1 branch: locks: strict access list: keyword substitution: kv total revisions: 1; selected revisions: 1 description: revision 11.1 date: 1995/05/28 18:20:29; author: lisar; state: Exp; Just preserving tests which have slightly different timing than the current build of the tests. This build found 2 HW problems. Note that these tests need to be run with DRAM in configuration 0. _____ RCS file: /s6/cvsroot/euterpe/verify/nasty/cachenasty5 var b1 1.exe,v Working file: verify/nasty/cachenasty5 var b1 1.exe head: 11.1 branch: locks: strict access list: keyword substitution: kv total revisions: 1; selected revisions: 1 description: _____ revision 11.1 date: 1995/05/28 18:20:34; author: lisar; state: Exp; Just preserving tests which have slightly different timing than the current build of the tests. This build found 2 HW problems. Note that these tests need to be run with DRAM in configuration 0. ______ RCS file: /s6/cvsroot/euterpe/verify/nasty/cachenasty5 var c1 1.exe,v Working file: verify/nasty/cachenasty5 var c1 1.exe head: 11.1 branch: locks: strict access list: keyword substitution: kv total revisions: 1; selected revisions: 1 description:

Exhibit D59 Page 15 of 53

date: 1995/05/28 18:20:38; author: lisar; state: Exp;

revision 11.1

```
Just preserving tests which have slightly different timing than the current
build of the tests.
This build found 2 HW problems. Note that these tests need to be run with DRAM
configuration 0.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachenasty5 var d1 1.exe,v
Working file: verify/nasty/cachenasty5 var d1 1.exe
head: 11.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
_____
revision 11.1
date: 1995/05/28 18:20:42; author: lisar; state: Exp;
Just preserving tests which have slightly different timing than the current
build of the tests.
This build found 2 HW problems. Note that these tests need to be run with DRAM
in
configuration 0.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachenasty5 var e1 1.exe,v
Working file: verify/nasty/cachenasty5 var e1 1.exe
head: 11.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1;
                  selected revisions: 1
description:
_____
revision 11.1
date: 1995/05/28 18:20:47; author: lisar; state: Exp;
Just preserving tests which have slightly different timing than the current
build of the tests.
This build found 2 HW problems. Note that these tests need to be run with DRAM
in
configuration 0.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachesynchnasty.S,v
Working file: verify/nasty/cachesynchnasty.S
head: 1.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
_____
revision 1.2
date: 1995/05/30 21:39:35; author: jeffm; state: Exp; lines: +2 -1
```

Exhibit D59 Page 16 of 53

```
Fix all to actually wait until all cylinders are finished before checking
cylinder status.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachesynchnasty2.S,v
Working file: verify/nasty/cachesynchnasty2.S
head: 1.7
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 7; selected revisions: 2
description:
revision 1.4
date: 1995/06/01 16:03:15; author: jeffm; state: Exp; lines: +4 -4
Oops, wasn't turning off rupts properly before calling pass.
_____
revision 1.3
date: 1995/05/30 21:39:37; author: jeffm; state: Exp; lines: +10 -2
Fix cachesynchnasty2 to save and restore r6 and r8 on event entry/exit.
Fix all to actually wait until all cylinders are finished before checking
cylinder status.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachesynchnasty2 var al 1.exe,v
Working file: verify/nasty/cachesynchnasty2 var a1 1.exe
head: 11.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
revision 11.1
date: 1995/05/28 18:20:51; author: lisar; state: Exp;
Just preserving tests which have slightly different timing than the current
build of the tests.
This build found 2 HW problems. Note that these tests need to be run with DRAM
configuration 0.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachesynchnasty2 var b1 1.exe,v
Working file: verify/nasty/cachesynchnasty2 var b1 1.exe
head: 11.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
```

Fix cachesynchnasty2 to save and restore r6 and r8 on event entry/exit.

Exhibit D59 Page 17 of 53

```
revision 11.1
date: 1995/05/28 18:20:56; author: lisar; state: Exp;
Just preserving tests which have slightly different timing than the current
build of the tests.
This build found 2 HW problems. Note that these tests need to be run with DRAM
configuration 0.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachesynchnasty2 var c1 1.exe,v
Working file: verify/nasty/cachesynchnasty2 var c1 1.exe
head: 11.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
_____
revision 11.1
date: 1995/05/28 18:21:01; author: lisar; state: Exp;
Just preserving tests which have slightly different timing than the current
build of the tests.
This build found 2 HW problems. Note that these tests need to be run with DRAM
configuration 0.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachesynchnasty2 var d1 1.exe,v
Working file: verify/nasty/cachesynchnasty2 var d1 1.exe
head: 11.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
revision 11.1
date: 1995/05/28 18:21:06; author: lisar; state: Exp;
Just preserving tests which have slightly different timing than the current
build of the tests.
This build found 2 HW problems. Note that these tests need to be run with DRAM
configuration 0.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachesynchnasty2 var el 1.exe,v
Working file: verify/nasty/cachesynchnasty2 var el 1.exe
head: 11.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
_____
```

Exhibit D59 Page 18 of 53

```
revision 11.1
date: 1995/05/28 18:21:10; author: lisar; state: Exp;
Just preserving tests which have slightly different timing than the current
build of the tests.
This build found 2 HW problems. Note that these tests need to be run with DRAM
configuration 0.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/exintbash.S,v
Working file: verify/nasty/exintbash.S
head: 3.7
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 7; selected revisions: 1
description:
_____
revision 3.3
date: 1995/05/30 21:39:39; author: jeffm; state: Exp; lines: +2 -1
Fix cachesynchnasty2 to save and restore r6 and r8 on event entry/exit.
Fix all to actually wait until all cylinders are finished before checking
cylinder status.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/hermnasty.S,v
Working file: verify/nasty/hermnasty.S
head: 1.15
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 15; selected revisions: 2
description:
_____
revision 1.10
date: 1995/06/02 00:34:36; author: jeffm; state: Exp; lines: +11 -7
Event daemon stores were not causing blocking reads - wrong addresses used.
revision 1.9
date: 1995/05/30 21:39:42; author: jeffm; state: Exp; lines: +2 -1
Fix cachesynchnasty2 to save and restore r6 and r8 on event entry/exit.
Fix all to actually wait until all cylinders are finished before checking
cylinder status.
______
RCS file: /s6/cvsroot/euterpe/verify/obj/system/nasty/Makefile,v
Working file: verify/obj/system/nasty/Makefile
head: 1.16
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 16; selected revisions: 2
```

Exhibit D59 Page 19 of 53

```
description:
revision 1.8
date: 1995/05/28 03:34:16; author: lisar; state: Exp; lines: +26 -1
Oops forgot to add the rules (can't build locally as would clobber executables I
ned to keep
_____
revision 1.7
date: 1995/05/28 03:26:45; author: lisar; state: Exp; lines: +26 -26
Add 0 build of var tests
______
RCS file: /s6/cvsroot/euterpe/verify/perf/cable loop perf.S,v
Working file: verify/perf/cable loop perf.S
head: 1.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
revision 1.1
date: 1995/06/01 23:52:09; author: claseman; state: Exp;
initial revision
_____
RCS file: /s6/cvsroot/euterpe/verify/perf/cerb perf.S,v
Working file: verify/perf/cerb perf.S
head: 1.7
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 7; selected revisions: 1
description:
_____
revision 1.4
date: 1995/06/01 23:50:35; author: claseman; state: Exp; lines: +7 -2
normalize cycle count
RCS file: /s6/cvsroot/euterpe/verify/perf/dcache perf.S,v
Working file: verify/perf/dcache perf.S
head: 1.6
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 6; selected revisions: 1
description:
revision 1.5
date: 1995/06/01 23:44:50; author: claseman; state: Exp; lines: +8 -8
correct GTLB config
_____
```

Exhibit D59 Page 20 of 53

```
RCS file: /s6/cvsroot/euterpe/verify/perf/dcachemiss perf.S,v
Working file: verify/perf/dcachemiss perf.S
head: 1.5
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 5; selected revisions: 1
description:
revision 1.3
date: 1995/06/01 23:44:54; author: claseman; state: Exp; lines: +6 -6
correct GTLB config
______
RCS file: /s6/cvsroot/euterpe/verify/perf/dram perf.S,v
Working file: verify/perf/dram perf.S
head: 1.8
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 8; selected revisions: 1
description:
_____
revision 1.4
date: 1995/06/01 23:50:10; author: claseman; state: Exp; lines: +10 -2
normalize cycle count
______
RCS file: /s6/cvsroot/euterpe/verify/perf/eaddi perf.S,v
Working file: verify/perf/eaddi perf.S
head: 1.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 1.1
date: 1995/06/01 23:52:11; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/easum perf.S,v
Working file: verify/perf/easum perf.S
head: 1.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
_____
revision 1.1
date: 1995/06/01 23:52:12; author: claseman; state: Exp;
```

Exhibit D59 Page 21 of 53

```
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/eshufflei4mux perf.S,v
Working file: verify/perf/eshufflei4mux perf.S
head: 1.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
revision 1.1
date: 1995/06/01 23:52:14; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/gextracti128 perf.S,v
Working file: verify/perf/gextracti128 perf.S
head: 1.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
_____
revision 1.1
date: 1995/06/01 23:52:16; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/gextracti64 perf.S,v
Working file: verify/perf/gextracti64 perf.S
head: 1.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
revision 1.1
date: 1995/06/01 23:52:18; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/ggfmul8_perf.S,v
Working file: verify/perf/ggfmul8 perf.S
head: 1.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
```

Exhibit D59 Page 22 of 53

```
revision 1.1
date: 1995/06/01 23:52:20; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/qmuladd16 perf.S,v
Working file: verify/perf/qmuladd16 perf.S
head: 1.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
revision 1.1
date: 1995/06/01 23:52:23; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/gmuladd32_perf.S,v
Working file: verify/perf/gmuladd32 perf.S
head: 1.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
revision 1.1
date: 1995/06/01 23:52:24; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/gmuladd64 perf.S,v
Working file: verify/perf/gmuladd64 perf.S
head: 1.4
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 4; selected revisions: 1
description:
revision 1.1
date: 1995/06/01 23:52:27; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/gmuladd8 perf.S,v
Working file: verify/perf/gmuladd8 perf.S
head: 1.3
branch:
locks: strict
access list:
```

Exhibit D59 Page 23 of 53

```
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
revision 1.1
date: 1995/06/01 23:52:29; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/hermes perf.S,v
Working file: verify/perf/hermes perf.S
head: 1.5
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 5; selected revisions: 1
description:
_____
revision 1.4
date: 1995/06/01 23:50:33; author: claseman; state: Exp; lines: +9 -3
normalize cycle count
RCS file: /s6/cvsroot/euterpe/verify/perf/icachemiss perf.S,v
Working file: verify/perf/icachemiss perf.S
head: 1.10
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 10; selected revisions: 1
description:
revision 1.1
date: 1995/06/01 23:52:31; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/rom perf.S,v
Working file: verify/perf/rom perf.S
head: 1.7
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 7; selected revisions: 1
description:
revision 1.4
date: 1995/06/01 23:50:12; author: claseman; state: Exp; lines: +10 -2
normalize cycle count
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/BOM,v
Working file: verify/toplevel/BOM
head: 44.1
```

Exhibit D59 Page 24 of 53

```
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 132; selected revisions: 13
description:
releasebom adding BOM
______
revision 39.18
date: 1995/06/01 00:34:03; author: jeffm; state: Exp; lines: +5 -1
Release Target: euterpe/verify/toplevel
     heldback debug.sig
New trace file.
_____
revision 39.17
date: 1995/05/31 17:53:29; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     template
var0 -> cvar0
revision 39.16
date: 1995/05/31 17:33:41; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Arrrrrgh. Trying again.
_____
revision 39.15
date: 1995/05/31 17:28:00; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Another try.
-----
revision 39.14
date: 1995/05/31 17:12:57; author: jeffm; state: Exp; lines: +5 -1
Release Target: euterpe/verify/toplevel/hermes
New hermes tests.
revision 39.13
date: 1995/05/31 14:08:22; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    template
exinbash 0 rules should be euterpe
_____
revision 39.12
date: 1995/05/31 05:18:03; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     template
Increase exintbast simtime
_____
revision 39.11
date: 1995/05/31 03:46:17; author: lisar; state: Exp; lines: +2 -2
```

Exhibit D59 Page 25 of 53

```
Release Target: euterpe/verify/toplevel
    template
Added exintbash variations
revision 39.10
date: 1995/05/30 16:58:08; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    nb debug.srl
Added signals and cvs string.
revision 39.9
date: 1995/05/29 19:59:46; author: lisar; state: Exp; lines: +5 -1
Release Target: euterpe/verify/toplevel
    nb debug.srl
Debug hermnasty
revision 39.8
date: 1995/05/28 03:14:51; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    template
Add var 0 tests
_____
revision 39.7
date: 1995/05/27 21:58:53; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    template
rearrange _var again
-----
revision 39.6
date: 1995/05/27 19:33:19; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    template
Put cachesynchnasty2 var a 0 at the head of the runmm regression
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/heldback debug.sig,v
Working file: verify/toplevel/heldback debug.sig
head: 39.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
revision 39.1
date: 1995/06/01 00:30:55; author: jeffm; state: Exp;
Trace signals to debug the synch op holdback logic.
______
```

Exhibit D59 Page 26 of 53

RCS file: /s6/cvsroot/euterpe/verify/toplevel/hermeseasy I1M0.S,v

```
Working file: verify/toplevel/hermeseasy I1MO.S
head: 35.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 35.2
date: 1995/05/30 18:59:05; author: lisar; state: Exp; lines: +5 -5
Avoid event register
                  ______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/nb debug.srl,v
Working file: verify/toplevel/nb debug.srl
head: 39.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 2
description:
_____
revision 39.2
date: 1995/05/30 16:57:35; author: jeffm; state: Exp; lines: +66 -2
Added signals.
_____
revision 39.1
date: 1995/05/29 19:59:30; author: lisar; state: Exp;
Debug hermnasty
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/template,v
Working file: verify/toplevel/template
head: 1.148
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 148; selected revisions: 7
description:
revision 1.102
date: 1995/05/31 17:53:09; author: lisar; state: Exp; lines: +34 -34
var0 -> cvar0
revision 1.101
date: 1995/05/31 14:08:02; author: lisar; state: Exp; lines: +6 -6
exinbash 0 rules should be euterpe
revision 1.100
date: 1995/05/31 05:17:35; author: lisar; state: Exp; lines: +12 -12
Increase exintbast simtime
_____
revision 1.99
date: 1995/05/31 03:45:46; author: lisar; state: Exp; lines: +13 -1
```

Exhibit D59 Page 27 of 53

```
Added exintbash variations
revision 1.98
date: 1995/05/28 03:14:35; author: lisar; state: Exp; lines: +25 -11
Add var 0 tests
revision 1.97
date: 1995/05/27 21:58:33; author: lisar; state: Exp; lines: +7 -8
rearrange var again
_____
revision 1.96
date: 1995/05/27 19:32:58; author: lisar; state: Exp; lines: +10 -8
Put cachesynchnasty2_var_a_0 at the head of the runmm regression
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/hermes/.checkoutrc,v
Working file: verify/toplevel/hermes/.checkoutrc
head: 1.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
_____
revision 1.1
date: 1995/05/31 17:10:09; author: jeffm; state: Exp;
Initial checkin.
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/hermes/.cvsignore,v
Working file: verify/toplevel/hermes/.cvsignore
head: 1.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
revision 1.1
date: 1995/05/31 17:09:16; author: jeffm; state: Exp;
Hermes test. Test uncached and cached data and instruction access for all
hermes spaces.
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/hermes/BOM, v
Working file: verify/toplevel/hermes/BOM
head: 12.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 22;
                  selected revisions: 6
description:
releasebom adding BOM
_____
```

Exhibit D59 Page 28 of 53

```
revision 4.0
date: 1995/05/31 17:33:26; author: jeffm; state: Exp; lines: +1 -1
Release Target: euterpe/verify/toplevel/hermes
Arrrrrgh. Trying again.
_____
revision 3.1
date: 1995/05/31 17:33:16; author: jeffm; state: Exp; lines: +2 -1
releasebom: File needs to be up-to-date to use commit -r
revision 3.0
date: 1995/05/31 17:27:41; author: jeffm; state: Exp; lines: +1 -1
Release Target: euterpe/verify/toplevel/hermes
Another try.
-----
revision 2.1
date: 1995/05/31 17:27:32; author: jeffm; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
______
revision 2.0
date: 1995/05/31 17:12:45; author: jeffm; state: Exp; lines: +1 -1
Release Target: euterpe/verify/toplevel/hermes
New hermes tests.
_____
revision 1.1
date: 1995/05/31 17:12:37; author: jeffm; state: Exp;
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/hermes/Makefile,v
Working file: verify/toplevel/hermes/Makefile
head: 1.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 2
description:
revision 1.2
date: 1995/05/31 17:21:37; author: jeffm; state: Exp; lines: +21 -21
Minor touchup.
date: 1995/05/31 17:09:18; author: jeffm; state: Exp;
Hermes test. Test uncached and cached data and instruction access for all
hermes spaces.
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/hermes/clean-request,v
Working file: verify/toplevel/hermes/clean-request
head: 3.1
branch:
locks: strict
```

Exhibit D59 Page 29 of 53

```
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
revision 3.1
date: 1995/05/31 17:31:44; author: jeffm; state: Exp;
Missed this one.
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/hermes/hermestest.S,v
Working file: verify/toplevel/hermes/hermestest.S
head: 1.8
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 8; selected revisions: 1
description:
-----
revision 1.1
date: 1995/05/31 17:09:21; author: jeffm; state: Exp;
Hermes test. Test uncached and cached data and instruction access for all
hermes spaces.
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/hermes/hermestest.ctd,v
Working file: verify/toplevel/hermes/hermestest.ctd
head: 1.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1;
                  selected revisions: 1
description:
_____
revision 1.1
date: 1995/05/31 17:09:22; author: jeffm; state: Exp;
Hermes test. Test uncached and cached data and instruction access for all
hermes spaces.
RCS file: /s6/cvsroot/euterpe/verify/toplevel/hermes/hermestest.cti,v
Working file: verify/toplevel/hermes/hermestest.cti
head: 1.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
revision 1.1
date: 1995/05/31 17:09:24; author: jeffm; state: Exp;
Hermes test. Test uncached and cached data and instruction access for all
hermes spaces.
______
```

Exhibit D59 Page 30 of 53

```
RCS file: /s6/cvsroot/euterpe/verify/toplevel/hermes/hermestest.gmat,v
Working file: verify/toplevel/hermes/hermestest.gmat
head: 1.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
revision 1.1
date: 1995/05/31 17:09:25; author: jeffm; state: Exp;
Hermes test. Test uncached and cached data and instruction access for all
hermes spaces.
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/hermes/hermestest.gmsk,v
Working file: verify/toplevel/hermes/hermestest.qmsk
head: 1.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
_____
revision 1.1
date: 1995/05/31 17:09:27; author: jeffm; state: Exp;
Hermes test. Test uncached and cached data and instruction access for all
hermes spaces.
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/hermes/hermestest.gxor,v
Working file: verify/toplevel/hermes/hermestest.gxor
head: 1.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
revision 1.1
date: 1995/05/31 17:09:29; author: jeffm; state: Exp;
Hermes test. Test uncached and cached data and instruction access for all
hermes spaces.
______
RCS file: /s6/cvsroot/euterpe/verify/ukernel/Makefile,v
Working file: verify/ukernel/Makefile
head: 1.13
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 13; selected revisions: 3
```

Exhibit D59 Page 31 of 53

```
description:
revision 1.13
date: 1995/06/01 01:57:34; author: doi; state: Exp; lines: +2 -2
whoops, used receiveMessage instead of test receiveMessage
revision 1.12
date: 1995/06/01 01:52:57; author: doi; state: Exp; lines: +5 -2
add receiveMessage and test sendMsg to default test list (I have not got them to
work with hwterp yet)
revision 1.11
date: 1995/06/01 01:46:09; author: doi; state: Exp; lines: +21 -3
allow tests to be found in 4 different locations (ukernel/tests{,perf,stress}
and lib/util/tests
_____
RCS file: /s6/cvsroot/euterpe/verilog/BOM, v
Working file: verilog/BOM
head: 6.9
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1390; selected revisions: 11
description:
top level verilog BOM
_____
revision 3.614
date: 1995/06/02 00:17:14; author: mws; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
uu/uuprblmfrz.Veqn uu/Makefile uu/uu control.pim:
  Freeze pla at end of evblm pipe assumed that both hiccup and interrupt would
  not be requested at the same time. Generally this is true, except for the
  one-issue window before the interrupt can cancel latent heldback store-and-
  swap hiccups. Test cachesynchnasty2_var_c_1 happened to accept an interrupt
  at the same time a SAAS heldback hiccup released, causing the event entry
  to be aborted leaving the hiccup to go to the SAAS but not unexpectedly
 with the user code running in event mode.
revision 3.613
date: 1995/05/31 18:35:54; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
Consolidate most recent cc bug fix to .0 BOM
Pick up placement tweaks for iteration in
     хlu
     rg
     nb
     hc0
     gf
     es
     at
     dr
```

Exhibit D59 Page 32 of 53

```
revision 3.612
date: 1995/05/31 06:36:50; author: billz; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/dr
Added this flat pim file, droutdpcontrol.pim, to
place drprbcsm and other drout control plas and
random cells.
revision 3.611
date: 1995/05/31 06:31:18; author: billz; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/cc
Two changes rolled into one:
1) logic (wiring only) change:
nbcout control field bit 14 (bit 4 of physical address) to come
from hexcount lsb for both writebacks and fills, not hardwired to zero.
This is for backing from hermes interleaved spaces.
2) layout change: some hexcount cells in cc control blob moved
down to avoid collision at the top level.
Converges in zero iterations.
revision 3.610
date: 1995/05/30 20:42:45; author: mws; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
euterpe.V hz/hz.V: Correct stage of net names to go with the fixing this in CC
  (the hz.V stage names were left alone but annotated with correcting comments;
  euterpe.V changed HZtCdNdxHzrdS1S4L7L8 to HZtCdNdxHzrdS1S4L9L10):
  cc/cc.V cc/cc control blob.pim: Hz.V lost track of the pipeline stages in
  building hz2or4ahdR7R8, actually delivering it in R9R10. Hz.V cannot fix,
   so we just pipeline 2 less to compensate. Test cachesynchnasty2 var a 1.
euterpe.status: Delete note saying we need a tau phase check (done).
 Clarify impact of interruptibility of GGFMul on prohibitting src=dst.
______
revision 3.609
date: 1995/05/29 01:16:06; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
places 100% at 900ps again
revision 3.608
date: 1995/05/28 22:24:34; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/es
move a couple of cells to stop overlap with mc. Latest power.tab.top
revision 3.607
date: 1995/05/28 22:20:40; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/rg
carve hole at top of rgcr for gf. Delete explicit DISPLAY setting from Makefile
revision 3.606
date: 1995/05/28 22:16:45; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/qf
```

Exhibit D59 Page 33 of 53

```
shift lower 7 sections left
revision 3.605
date: 1995/05/27 16:41:36; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/rg
remove force of power levels on cr interface to prevent dc load problems
revision 3.604
date: 1995/05/27 08:27:20; author: mws; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
cc/cc.V cc/cc control blob.pim: Hz.V lost track of the pipeline stages
 in building hz2or4ahdR7R8, actually delivering it in R9R10. Hz.V cannot
 fix, so we just pipeline 2 less to compensate. Test cachesynchnasty2_var_a_1
 noticed. Also need to update hz.V and euterpe.V to show correct staging
  and not recreate confusion as we forget what happened here. But wait for
  verification to prove this is cause of failure.
cust intf.wkz: Update Cache and CTag address setup and hold times to use the
 newly-stick-approved 400ps requirements rather than the more abitrary 50%*tick
 requirement. This reduces requirements enough to pass DTag adrs hold.
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/BOM,v
Working file: verilog/bsrc/BOM
head: 346.6
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1737; selected revisions: 16
description:
_____
revision 315.0
date: 1995/06/02 00:16:54; author: mws; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
uu/uuprblmfrz.Vegn uu/Makefile uu/uu control.pim:
  Freeze pla at end of evblm pipe assumed that both hiccup and interrupt would
 not be requested at the same time. Generally this is true, except for the
 one-issue window before the interrupt can cancel latent heldback store-and-
 swap hiccups. Test cachesynchnasty2 var c 1 happened to accept an interrupt
 at the same time a SAAS heldback hiccup released, causing the event entry
 to be aborted leaving the hiccup to go to the SAAS but not unexpectedly
 with the user code running in event mode.
revision 314.1
date: 1995/06/02 00:16:41; author: mws; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
revision 314.0
date: 1995/05/31 18:34:57; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
```

Consolidate most recent cc bug fix to .0 BOM

```
Pick up placement tweaks for iteration in
     хlu
     rq
     nb
     hc0
     qf
     es
     at
-----
revision 313.3
date: 1995/05/31 18:34:27; author: tbr; state: Exp; lines: +12 -9
releasebom: File needs to be up-to-date to use commit -r
revision 313.2
date: 1995/05/31 06:36:32; author: billz; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/dr
Added this flat pim file, droutdpcontrol.pim, to
place drprbcsm and other drout control plas and
random cells.
revision 313.1
date: 1995/05/31 06:30:59; author: billz; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/cc
Two changes rolled into one:
1) logic (wiring only) change:
nbcout control field bit 14 (bit 4 of physical address) to come
from hexcount 1sb for both writebacks and fills, not hardwired to zero.
This is for backing from hermes interleaved spaces.
2) layout change: some hexcount cells in cc control blob moved
down to avoid collision at the top level.
Converges in zero iterations.
_____
revision 313.0
date: 1995/05/30 20:42:19; author: mws; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
euterpe.V hz/hz.V: Correct stage of net names to go with the fixing this in CC
  (the hz.V stage names were left alone but annotated with correcting comments;
  euterpe.V changed HZtCdNdxHzrdS1S4L7L8 to HZtCdNdxHzrdS1S4L9L10):
  cc/cc.V cc/cc control blob.pim: Hz.V lost track of the pipeline stages in
  building hz2or4ahdR7R8, actually delivering it in R9R10. Hz.V cannot fix,
  so we just pipeline 2 less to compensate. Test cachesynchnasty2 var a 1.
euterpe.status: Delete note saying we need a tau phase check (done).
 Clarify impact of interruptibility of GGFMul on prohibitting src=dst.
revision 312.1
date: 1995/05/30 20:42:06; author: mws; state: Exp; lines: +4 -4
releasebom: File needs to be up-to-date to use commit -r
revision 312.0
date: 1995/05/29 01:15:37; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
```

Exhibit D59 Page 35 of 53

```
places 100% at 900ps again
-----
revision 311.5
date: 1995/05/29 01:15:17; author: tbr; state: Exp; lines: +6 -7
releasebom: File needs to be up-to-date to use commit -r
revision 311.4
date: 1995/05/28 22:24:14; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/es
move a couple of cells to stop overlap with mc. Latest power.tab.top
revision 311.3
date: 1995/05/28 22:20:19; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/rg
carve hole at top of rgcr for gf. Delete explicit DISPLAY setting from Makefile
revision 311.2
date: 1995/05/28 22:16:28; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/gf
shift lower 7 sections left
_____
revision 311.1
date: 1995/05/27 16:41:20; author: tbr; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/rg
remove force of power levels on cr interface to prevent dc load problems
_____
revision 311.0
date: 1995/05/27 08:27:01; author: mws; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
cc/cc.V cc/cc control blob.pim: Hz.V lost track of the pipeline stages
  in building hz2or4ahdR7R8, actually delivering it in R9R10. Hz.V cannot
  fix, so we just pipeline 2 less to compensate. Test cachesynchnasty2 var a 1
  noticed. Also need to update hz.V and euterpe.V to show correct staging
  and not recreate confusion as we forget what happened here. But wait for
 verification to prove this is cause of failure.
cust intf.wkz: Update Cache and CTag address setup and hold times to use the
 newly-stick-approved 400ps requirements rather than the more abitrary 50%*tick
 requirement. This reduces requirements enough to pass DTag adrs hold.
revision 310.2
date: 1995/05/27 08:26:48; author: mws; state: Exp; lines: +3 -3
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/Makefile.tst,v
Working file: verilog/bsrc/Makefile.tst
head: 40.104
branch:
locks: strict
access list:
keyword substitution: kv
```

Exhibit D59 Page 36 of 53

```
total revisions: 104; selected revisions: 1
description:
revision 40.82
date: 1995/05/27 17:57:22; author: tbr; state: Exp; lines: +6 -6
Make %.power.tab.top rule :: so it does not trigger a new top level iteration
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/chip euterpe-base.netcap,v
Working file: verilog/bsrc/chip euterpe-base.netcap
head: 312.20
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 20; selected revisions: 1
description:
______
revision 312.1
date: 1995/05/30 03:07:44; author: tbr; state: Exp;
initial checkin
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/chip euterpe-base.nof,v
Working file: verilog/bsrc/chip euterpe-base.nof
head: 307.11
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 11; selected revisions: 2
description:
revision 307.3
date: 1995/05/29 00:57:42; author: tbr; state: Exp; lines: +67952 -67954
update from latest run
______
revision 307.2
date: 1995/05/27 18:02:47; author: tbr; state: Exp; lines: +33831 -33831
update from latest top level run
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/chip euterpe-base.pim,v
Working file: verilog/bsrc/chip euterpe-base.pim
head: 312.23
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 23; selected revisions: 1
description:
revision 312.1
date: 1995/05/30 03:09:56; author: tbr; state: Exp;
initial checkin
_____
```

Exhibit D59 Page 37 of 53

```
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/chip euterpe-base.strength,v
Working file: verilog/bsrc/chip euterpe-base.strength
head: 312.20
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 20; selected revisions: 1
description:
revision 312.1
date: 1995/05/30 03:09:17; author: tbr; state: Exp;
initial checkin
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/chip euterpe-base.xrf,v
Working file: verilog/bsrc/chip euterpe-base.xrf
head: 307.11
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 11; selected revisions: 2
description:
_____
revision 307.3
date: 1995/05/29 01:01:08; author: tbr; state: Exp; lines: +25192 -25187
update from latest run
_____
revision 307.2
date: 1995/05/27 18:00:24; author: tbr; state: Exp; lines: +25381 -25234
update from latest top level run
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/euterpe.V,v
Working file: verilog/bsrc/euterpe.V
head: 6.431
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 431; selected revisions: 1
description:
revision 6.421
date: 1995/05/30 20:34:12; author: mws; state: Exp; lines: +18 -17
euterpe.V hz/hz.V: Correct stage of net names to go with the fixing this in CC
 (the hz.V stage names were left alone but annotated with correcting comments;
 euterpe.V changed HZtCdNdxHzrdS1S4L7L8 to HZtCdNdxHzrdS1S4L9L10);
 cc/cc.V cc/cc control blob.pim: Hz.V lost track of the pipeline stages in
  building hz2or4ahdR7R8, actually delivering it in R9R10. Hz.V cannot fix,
  so we just pipeline 2 less to compensate. Test cachesynchnasty2 var a 1.
_____
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/euterpe.status,v
Working file: verilog/bsrc/euterpe.status
head: 24.83
```

Exhibit D59 Page 38 of 53

```
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 83; selected revisions: 2
description:
______
revision 24.74
date: 1995/05/30 20:53:08; author: mws; state: Exp; lines: +1 -1
Last checkin missed making gqfmul all uppercase in opcode table to
denote that it is not fully compliant.
revision 24.73
date: 1995/05/30 20:35:10; author: mws; state: Exp; lines: +5 -8
Delete note saying we need a tau phase check (done).
 Clarify impact of interruptibility of GGFMul on prohibitting src=dst.
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/i_euterpe_wrap.tb,v
Working file: verilog/bsrc/i euterpe wrap.tb
head: 187.15
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 15; selected revisions: 1
description:
_____
revision 187.11
date: 1995/05/28 03:16:23; author: lisar; state: Exp; lines: +2 -2
Drive Z onto poko (not sure why Z is better than U as at time O it it driven
by stimulus file - but it works!).
_____
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/at/BOM,v
Working file: verilog/bsrc/at/BOM
head: 93.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 184; selected revisions: 2
description:
releasebom adding BOM
revision 90.0
date: 1995/05/31 18:20:26; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
Consolidate most recent cc bug fix to .0 BOM
Pick up placement tweaks for iteration in
     x 111
     rg
     nb
     hc0
```

Exhibit D59 Page 39 of 53

```
af
     es
     at
     dr
______
revision 89.1
date: 1995/05/31 18:20:17; author: tbr; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/at/at.pim,v
Working file: verilog/bsrc/at/at.pim
head: 51.23
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 23; selected revisions: 1
description:
-----
revision 51.22
date: 1995/05/31 05:16:16; author: tbr; state: Exp; lines: +2 -2
placement adjust for second iteration
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/cc/BOM,v
Working file: verilog/bsrc/cc/BOM
head: 92.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 182; selected revisions: 4
description:
releasebom adding BOM
_____
revision 88.0
date: 1995/05/31 06:30:40; author: billz; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc/cc
Two changes rolled into one:
1) logic (wiring only) change:
nbcout control field bit 14 (bit 4 of physical address) to come
from hexcount 1sb for both writebacks and fills, not hardwired to zero.
This is for backing from hermes interleaved spaces.
2) layout change: some hexcount cells in cc control blob moved
down to avoid collision at the top level.
Converges in zero iterations.
revision 87.1
date: 1995/05/31 06:30:34; author: billz; state: Exp; lines: +3 -3
releasebom: File needs to be up-to-date to use commit -r
revision 87.0
date: 1995/05/27 08:22:01; author: mws; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
```

Exhibit D59 Page 40 of 53

```
cc/cc.V cc/cc control blob.pim: Hz.V lost track of the pipeline stages
  in building hz2or4ahdR7R8, actually delivering it in R9R10. Hz.V cannot
  fix, so we just pipeline 2 less to compensate. Test cachesynchnasty2 var a 1
  noticed. Also need to update hz.V and euterpe.V to show correct staging
 and not recreate confusion as we forget what happened here. But wait for
 verification to prove this is cause of failure.
cust intf.wkz: Update Cache and CTag address setup and hold times to use the
 newly-stick-approved 400ps requirements rather than the more abitrary 50%*tick
 requirement. This reduces requirements enough to pass DTag adrs hold.
revision 86.1
date: 1995/05/27 08:21:55; author: mws; state: Exp; lines: +3 -3
releasebom: File needs to be up-to-date to use commit -r
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/cc/cc.V,v
Working file: verilog/bsrc/cc/cc.V
head: 1.87
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 87; selected revisions: 2
description:
_____
revision 1.84
date: 1995/05/31 06:29:35; author: billz; state: Exp; lines: +10 -9
Two changes rolled into one:
1) logic (wiring only) change:
nbcout control field bit 14 (bit 4 of physical address) to come
from hexcount 1sb for both writebacks and fills, not hardwired to zero.
This is for backing from hermes interleaved spaces.
2) layout change: some hexcount cells in cc control blob moved
down to avoid collision at the top level.
_____
revision 1.83
date: 1995/05/27 08:19:55; author: mws; state: Exp; lines: +12 -5
cc/cc.V cc/cc control blob.pim: Hz.V lost track of the pipeline stages
  in building hz2or4ahdR7R8, actually delivering it in R9R10. Hz.V cannot
  fix, so we just pipeline 2 less to compensate. Test cachesynchnasty2 var a 1
 noticed. Also need to update hz.V and euterpe.V to show correct staging
 and not recreate confusion as we forget what happened here. But wait for
 verification to prove this is cause of failure.
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/cc/cc control blob.pim, v
Working file: verilog/bsrc/cc/cc control blob.pim
head: 77.8
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 8; selected revisions: 2
description:
revision 77.5
```

Exhibit D59 Page 41 of 53

```
date: 1995/05/31 06:29:37; author: billz; state: Exp; lines: +82 -84
Two changes rolled into one:
1) logic (wiring only) change:
nbcout control field bit 14 (bit 4 of physical address) to come
from hexcount 1sb for both writebacks and fills, not hardwired to zero.
This is for backing from hermes interleaved spaces.
2) layout change: some hexcount cells in cc control blob moved
down to avoid collision at the top level.
_____
revision 77.4
date: 1995/05/27 08:19:58; author: mws; state: Exp; lines: +3 -3
cc/cc.V cc/cc control blob.pim: Hz.V lost track of the pipeline stages
  in building hz2or4ahdR7R8, actually delivering it in R9R10. Hz.V cannot
 fix, so we just pipeline 2 less to compensate. Test cachesynchnasty2 var a 1
 noticed. Also need to update hz.V and euterpe.V to show correct staging
  and not recreate confusion as we forget what happened here. But wait for
  verification to prove this is cause of failure.
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/dr/BOM,v
Working file: verilog/bsrc/dr/BOM
head: 77.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 155; selected revisions: 2
description:
releasebom adding BOM
______
revision 73.0
date: 1995/05/31 06:36:14; author: billz; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc/dr
Added this flat pim file, droutdpcontrol.pim, to
place drprbcsm and other drout control plas and
random cells.
______
revision 72.1
date: 1995/05/31 06:36:07; author: billz; state: Exp; lines: +4 -3
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/dr/Makefile,v
Working file: verilog/bsrc/dr/Makefile
head: 1.34
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 34; selected revisions: 1
description:
revision 1.33
date: 1995/05/31 06:34:18; author: billz; state: Exp; lines: +2 -2
Added this flat pim file, droutdpcontrol.pim, to
place drprbcsm and other drout control plas and
```

Exhibit D59 Page 42 of 53

```
random cells.
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/dr/droutdpcontrol.pim,v
Working file: verilog/bsrc/dr/droutdpcontrol.pim
head: 72.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
revision 72.1
date: 1995/05/31 06:34:19; author: billz; state: Exp;
Added this flat pim file, droutdpcontrol.pim, to
place drprbcsm and other drout control plas and
random cells.
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/dr/pimlib.pl,v
Working file: verilog/bsrc/dr/pimlib.pl
head: 20.16
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 16; selected revisions: 1
description:
_____
revision 20.16
date: 1995/05/31 06:34:21; author: billz; state: Exp; lines: +14 -16
Added this flat pim file, droutdpcontrol.pim, to
place drprbcsm and other drout control plas and
random cells.
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/es/BOM,v
Working file: verilog/bsrc/es/BOM
head: 97.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 198; selected revisions: 4
description:
revision 94.0
date: 1995/05/31 18:24:04; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
Consolidate most recent cc bug fix to .0 BOM
Pick up placement tweaks for iteration in
     хlu
     rq
```

Exhibit D59 Page 43 of 53

```
nb
     hc0
     qf
     es
     at
    dr
______
revision 93.1
date: 1995/05/31 18:23:54; author: tbr; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
revision 93.0
date: 1995/05/28 22:23:51; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc/es
move a couple of cells to stop overlap with mc. Latest power.tab.top
revision 92.1
date: 1995/05/28 22:23:42; author: tbr; state: Exp; lines: +3 -3
releasebom: File needs to be up-to-date to use commit -r
_____
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/es/es.pim,v
Working file: verilog/bsrc/es/es.pim
head: 5.55
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 55; selected revisions: 2
description:
revision 5.53
date: 1995/05/31 05:18:01; author: tbr; state: Exp; lines: +40 -40
placement adjust for second iteration
______
revision 5.52
date: 1995/05/28 22:22:30; author: tbr; state: Exp; lines: +82 -82
move a couple of cells to stop overlap with mc. Latest power.tab.top
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/es/es.power.tab.top,v
Working file: verilog/bsrc/es/es.power.tab.top
head: 65.12
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 12; selected revisions: 1
description:
revision 65.12
date: 1995/05/28 22:22:54; author: tbr; state: Exp; lines: +766 -766
move a couple of cells to stop overlap with mc. Latest power.tab.top
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/gf/BOM,v
```

Exhibit D59 Page 44 of 53

```
Working file: verilog/bsrc/gf/BOM
head: 37.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 72; selected revisions: 4
description:
releasebom adding BOM
_____
revision 37.0
date: 1995/05/31 18:24:41; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
Consolidate most recent cc bug fix to .0 BOM
Pick up placement tweaks for iteration in
     хlu
     rg
     nb
     hc0
     qf
     es
     at.
     dr
_____
revision 36.1
date: 1995/05/31 18:24:31; author: tbr; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
_____
revision 36.0
date: 1995/05/28 22:16:10; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc/gf
shift lower 7 sections left
_____
revision 35.1
date: 1995/05/28 22:16:04; author: tbr; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/qf/qf.pim,v
Working file: verilog/bsrc/gf/gf.pim
head: 4.15
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 15; selected revisions: 2
description:
revision 4.15
date: 1995/05/31 05:19:39; author: tbr; state: Exp; lines: +2 -2
placement adjust for second iteration
_____
revision 4.14
```

Exhibit D59 Page 45 of 53

```
date: 1995/05/28 22:14:58; author: tbr; state: Exp; lines: +7 -7
shift lower 7 sections left
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/hc/BOM,v
Working file: verilog/bsrc/hc/BOM
head: 125.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 250; selected revisions: 2
description:
releasebom adding BOM
revision 109.0
date: 1995/05/31 18:25:30; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
Consolidate most recent cc bug fix to .0 BOM
Pick up placement tweaks for iteration in
     хlи
     rq
     nb
     hc0
     qf
     es
     at
     dr
revision 108.1
date: 1995/05/31 18:25:21; author: tbr; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/hc/hc0 control.pim,v
Working file: verilog/bsrc/hc/hc0 control.pim
head: 73.25
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 25; selected revisions: 1
description:
revision 73.16
date: 1995/05/31 05:21:07; author: tbr; state: Exp; lines: +5 -5
placement adjust for second iteration
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/hz/BOM,v
Working file: verilog/bsrc/hz/BOM
head: 30.0
branch:
locks: strict
```

Exhibit D59 Page 46 of 53

```
access list:
keyword substitution: kv
total revisions: 58; selected revisions: 2
description:
releasebom adding BOM
revision 30.0
date: 1995/05/30 20:39:15; author: mws; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
euterpe.V hz/hz.V: Correct stage of net names to go with the fixing this in CC
  (the hz.V stage names were left alone but annotated with correcting comments;
 euterpe.V changed HZtCdNdxHzrdS1S4L7L8 to HZtCdNdxHzrdS1S4L9L10):
 cc/cc.V cc/cc control blob.pim: Hz.V lost track of the pipeline stages in
  building hz2or4ahdR7R8, actually delivering it in R9R10. Hz.V cannot fix,
  so we just pipeline 2 less to compensate. Test cachesynchnasty2 var a 1.
euterpe.status: Delete note saying we need a tau phase check (done).
 Clarify impact of interruptibility of GGFMul on prohibitting src=dst.
revision 29.1
date: 1995/05/30 20:39:08; author: mws; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/hz/hz.V,v
Working file: verilog/bsrc/hz/Nz.V
head: 1.15
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 15; selected revisions: 1
description:
revision 1.15
date: 1995/05/30 20:34:51; author: mws; state: Exp; lines: +81 -51
euterpe.V hz/hz.V: Correct stage of net names to go with the fixing this in CC
  (the hz.V stage names were left alone but annotated with correcting comments;
  euterpe.V changed HZtCdNdxHzrdS1S4L7L8 to HZtCdNdxHzrdS1S4L9L10):
 cc/cc.V cc/cc control blob.pim: Hz.V lost track of the pipeline stages in
  building hz2or4ahdR7R8, actually delivering it in R9R10. Hz.V cannot fix,
  so we just pipeline 2 less to compensate. Test cachesynchnasty2 var a 1.
_____
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/nb/BOM,v
Working file: verilog/bsrc/nb/BOM
head: 130.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 261; selected revisions: 2
description:
releasebom adding BOM
_____
revision 128.0
date: 1995/05/31 18:28:06; author: tbr; state: Exp; lines: +1 -1
```

Exhibit D59 Page 47 of 53

```
Release Target: euterpe/verilog/bsrc
Consolidate most recent cc bug fix to .0 BOM
Pick up placement tweaks for iteration in
     хlu
     rq
     nb
     hc0
     qf
     es
     at
revision 127.1
date: 1995/05/31 18:27:53; author: tbr; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/nb/nb mid.pim, v
Working file: verilog/bsrc/nb/nb_mid.pim
head: 88.16
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 16; selected revisions: 1
description:
_____
revision 88.16
date: 1995/05/31 05:22:54; author: tbr; state: Exp; lines: +3 -3
placement update for second iteration
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/rg/BOM,v
Working file: verilog/bsrc/rg/BOM
head: 136.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 297; selected revisions: 6
description:
revision 131.0
date: 1995/05/31 18:29:09; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
Consolidate most recent cc bug fix to .0 BOM
Pick up placement tweaks for iteration in
     хlu
     rg
     nb
     hc0
```

Exhibit D59 Page 48 of 53

```
af
     es
     at
     dr
______
revision 130.1
date: 1995/05/31 18:28:58; author: tbr; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
revision 130.0
date: 1995/05/28 22:19:57; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc/rg
carve hole at top of rgcr for gf. Delete explicit DISPLAY setting from Makefile
revision 129.1
date: 1995/05/28 22:19:48; author: tbr; state: Exp; lines: +3 -3
releasebom: File needs to be up-to-date to use commit -r
______
revision 129.0
date: 1995/05/27 16:41:03; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc/rg
remove force of power levels on cr interface to prevent dc load problems
_____
revision 128.1
date: 1995/05/27 16:40:56; author: tbr; state: Exp; lines: +3 -3
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/rg/Makefile,v
Working file: verilog/bsrc/rg/Makefile
head: 1.50
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 50; selected revisions: 1
description:
revision 1.50
date: 1995/05/28 22:18:20; author: tbr; state: Exp; lines: +1 -3
carve hole at top of rgcr for gf. Delete explicit DISPLAY setting from Makefile
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/rg/genptab.pl,v
Working file: verilog/bsrc/rg/genptab.pl
head: 82.4
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 4; selected revisions: 1
description:
_____
revision 82.4
date: 1995/05/27 16:40:18; author: tbr; state: Exp; lines: +38 -32
```

Exhibit D59 Page 49 of 53

```
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/rg/rg.pim,v
Working file: verilog/bsrc/rg/rg.pim
head: 82.31
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 31; selected revisions: 2
description:
revision 82.26
date: 1995/05/31 05:32:55; author: tbr; state: Exp; lines: +18 -18
placement update for second iteration
revision 82.25
date: 1995/05/28 22:18:23; author: tbr; state: Exp; lines: +8 -8
carve hole at top of rgcr for gf. Delete explicit DISPLAY setting from Makefile
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/rg/rg.power.tab.top,v
Working file: verilog/bsrc/rg/rg.power.tab.top
head: 79.12
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 12; selected revisions: 1
description:
______
revision 79,12
date: 1995/05/27 16:40:25; author: tbr; state: Exp; lines: +816 -816
remove force of power levels on cr interface to prevent dc load problems
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/uu/BOM,v
Working file: verilog/bsrc/uu/BOM
head: 218.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 480; selected revisions: 2
description:
revision 202.0
date: 1995/06/02 00:15:43; author: mws; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
uu/uuprblmfrz.Veqn uu/Makefile uu/uu control.pim:
 Freeze pla at end of evblm pipe assumed that both hiccup and interrupt would
 not be requested at the same time. Generally this is true, except for the
 one-issue window before the interrupt can cancel latent heldback store-and-
 swap hiccups. Test cachesynchnasty2 var c 1 happened to accept an interrupt
 at the same time a SAAS heldback hiccup released, causing the event entry
```

remove force of power levels on cr interface to prevent dc load problems

Exhibit D59 Page 50 of 53

to be aborted leaving the hiccup to go to the SAAS but not unexpectedly with the user code running in event mode. ----revision 201.1 date: 1995/06/02 00:15:34; author: mws; state: Exp; lines: +4 -4 releasebom: File needs to be up-to-date to use commit -r ______ RCS file: /s6/cvsroot/euterpe/verilog/bsrc/uu/Makefile,v Working file: verilog/bsrc/uu/Makefile head: 1.79 branch: locks: strict access list: keyword substitution: kv total revisions: 79; selected revisions: 1 description: _____ revision 1.79 date: 1995/06/02 00:06:50; author: mws; state: Exp; lines: +14 -2 uu/uuprblmfrz.Vegn uu/Makefile uu/uu control.pim: Freeze pla at end of evblm pipe assumed that both hiccup and interrupt would not be requested at the same time. Generally this is true, except for the one-issue window before the interrupt can cancel latent heldback store-andswap hiccups. Test cachesynchnasty2 var c 1 happened to accept an interrupt at the same time a SAAS heldback hiccup released, causing the event entry to be aborted leaving the hiccup to go to the SAAS but not unexpectedly with the user code running in event mode. _______ RCS file: /s6/cvsroot/euterpe/verilog/bsrc/uu/uu control.pim,v Working file: verilog/bsrc/uu/uu control.pim head: 68.60 branch: locks: strict access list: keyword substitution: kv total revisions: 60; selected revisions: 1 description: revision 68.55 date: 1995/06/02 00:07:18; author: mws; state: Exp; lines: +9 -6 uu/uuprblmfrz.Veqn uu/Makefile uu/uu control.pim: Freeze pla at end of evblm pipe assumed that both hiccup and interrupt would not be requested at the same time. Generally this is true, except for the one-issue window before the interrupt can cancel latent heldback store-andswap hiccups. Test cachesynchnasty2 var c 1 happened to accept an interrupt at the same time a SAAS heldback hiccup released, causing the event entry to be aborted leaving the hiccup to go to the SAAS but not unexpectedly with the user code running in event mode. -----RCS file: /s6/cvsroot/euterpe/verilog/bsrc/uu/uuprblmfrz.Veqn,v

RCS file: /s6/cvsroot/euterpe/verilog/bsrc/uu/uuprblmfrz.Veqn,vWorking file: verilog/bsrc/uu/uuprblmfrz.Veqn head: 36.18 branch: locks: strict

Exhibit D59 Page 51 of 53

```
access list:
keyword substitution: kv
total revisions: 18; selected revisions: 1
description:
revision 36.17
date: 1995/06/02 00:07:43; author: mws; state: Exp; lines: +25 -4
uu/uuprblmfrz.Vegn uu/Makefile uu/uu control.pim:
 Freeze pla at end of evblm pipe assumed that both hiccup and interrupt would
 not be requested at the same time. Generally this is true, except for the
 one-issue window before the interrupt can cancel latent heldback store-and-
 swap hiccups. Test cachesynchnasty2 var c 1 happened to accept an interrupt
 at the same time a SAAS heldback hiccup released, causing the event entry
 to be aborted leaving the hiccup to go to the SAAS but not unexpectedly
 with the user code running in event mode.
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/xlu/BOM, v
Working file: verilog/bsrc/xlu/BOM
head: 65.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 132; selected revisions: 2
description:
releasebom adding BOM
_____
revision 61.0
date: 1995/05/31 18:31:00; author: tbr; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
Consolidate most recent cc bug fix to .0 BOM
Pick up placement tweaks for iteration in
     xlu
     rq
     nb
     hc0
     qf
     es
     at.
     dr
revision 60.1
date: 1995/05/31 18:30:49; author: tbr; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/xlu/x123.pim,v
Working file: verilog/bsrc/xlu/x123.pim
head: 33.9
branch:
locks: strict
access list:
```

Exhibit D59 Page 52 of 53

keyword substitution: kv

total revisions: 9; selected revisions: 1

description:

revision 33.9

date: 1995/05/31 05:33:54; author: tbr; state: Exp; lines: +3 -3

placement tweak for second iteration

Exhibit D59 Page 53 of 53